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Appl. No.: 09/745,289 Confirmation No.: 6983  
Applicant(s): Romero et al.  
Filed: December 20, 2000  
Art Unit: 2157  
Examiner: B. N. Burgess  
Title: SEGMENTING ELECTRONIC DOCUMENTS FOR USE ON A DEVICE OF LIMITED CAPABILITY


Docket No.: 042933/274313  
Customer No.: 00826

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF TRANSMITTAL  
(PATENT APPLICATION – 37 C.F.R. § 41.37)**

1. Transmitted herewith is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on November 14, 2008.
2. ☐ Applicant claims small entity status.
3. Pursuant to 37 C.F.R. § 41.20(b)(2), the fee for filing the Appeal Brief is:
  - ☐ small entity \$270.00
  - ☐ other than small entity \$540.00
  - ☒ Fee for filing Appeal Brief was previously submitted on December 28, 2007 in the amount of \$510.00.
  - ☐ Fee was paid during e-filing.
  - ☐ Please charge the fee to Deposit Account 16-0605.
  - ☒ Any additional fee or refund may be charged to Deposit Account 16-0605.

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**APPEAL BRIEF UNDER 37 CFR § 41.37**

This Appeal Brief is filed pursuant to the Notice of Appeal filed November 14, 2008 and in response to the Notice of Panel Decision dated January 12, 2009.

1. ***Real Party in Interest.***

The real party in interest in this appeal is Nokia Inc., which is the assignee of the above-referenced patent application by assignment from Nokia Holding Inc. subsequent to the merger of Nokia Holding Inc. with Eizel Technologies, Inc., the original assignee of the above-referenced patent application.

2. ***Related Appeals and Interferences.***

There are no related appeals and/or interferences involving this application or its subject matter.

3. ***Status of Claims.***

The present application currently includes claims 1, 2, 5-14, 16-18 and 20-53, which all stand rejected. Appellants appeal the rejections of claims 1, 2, 5-14, 16-18 and 20-53.

4. ***Status of Amendments.***

There are no unentered amendments in this application.

5. ***Summary of Claimed Subject Matter.***

The claimed invention provides various methods, apparatuses and a machine readable document and program for segmenting electronic documents. In this regard, as recited in independent claim 1, a method according to one embodiment includes receiving a machine readable file containing a document that is to be served to a client for display on a client device (page 2, lines 11-13). The organization of the document in the file is expressed as a hierarchy of information (page 2, lines 14-15). The method further includes deriving subdocuments from the hierarchy of information (page 2, lines 15-16) by traversing the hierarchy and assembling the subdocuments from segments (page 2, lines 23-24). At least some of the subdocuments are each assembled from more than one of the segments (page 2, line 24 to page 3, line 1). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 2, lines 16-18). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 2, lines 18-20). The assembly of the subdocuments conforms to an algorithm that tends to balance the respective sizes of the subdocuments (page 3, lines 1-3). Claim 5, which is dependent from independent claim 1, further provides that the assembling conforms to an algorithm that tends to favor assembling each of the subdocuments from segments that have common parents in the hierarchy (page 3, lines 1-4).

Independent claim 13 is directed to a method that includes receiving, from an origin server (page 3, lines 7-8), a machine readable file containing a document that is to be served to a client for display on a client device (page 2, lines 11-13). The file is expressed in a language that does not organize segments of the document in a hierarchy (page 3, lines 8-9). The method further includes converting the file to a language that organizes segments of the document in a hierarchy (page 3, lines 9-11) and traversing the hierarchy and assembling subdocuments from the segments (page 2, lines 23-24). At least some of the subdocuments are assembled from more than one of the segments (page 2, line 24 to page 3, line 1). The assembling conforms to an algorithm that tends to balance the respective sizes of the subdocuments (page 3, lines 1-3). The algorithm also favors assembling the subdocuments from segments that have common

parents in the hierarchy (page 3, lines 2-4). The algorithm also favors assembling the subdocuments from segments for which replications of nodes in the hierarchy are not required (page 3, lines 4-7). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 2, lines 16-18). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 2, lines 18-20). The method further includes serving the subdocuments to the client individually as requested by the client (page 3, lines 12-13) based on the contained information that enables it to be linked to another of the subdocuments (page 3, lines 14-17).

Independent claim 14 recites a machine-readable document held on a storage medium for serving to a client (page 3, line 24 to page 4, line 1). The document is organized as a set of subdocuments (page 4, line 1). At least one of the subdocuments contains information that enables the subdocument to be linked to another of the subdocuments (page 4, lines 2-3). The information enables the subdocument to be linked comprising a URL (page 4, lines 9-10). The subdocuments include an assembly of segments of the document that are part of a hierarchical expression of the document in which the subdocuments are of approximately the same size (page 4, lines 3-7).

Independent claim 17 recites a method including receiving from a client a request for a document to be displayed on a client device (page 4, lines 12-13) and serving separately to the client a subdocument that represents less than all of the requested document (page 4, lines 14-15). The subdocument contains information that links it to at least one other subdocument (page 4, lines 15-16). The method further includes receiving from the client an invocation of the link to the other subdocument (page 4, lines 17-18) and serving separately to the client device the other subdocument (page 4, lines 18-19). The subdocuments being of essentially the same length (page 5, lines 8-9).

Independent claim 21 recites a method including receiving from a server at a client device, a subdocument of a larger document for display on the client device (page 5, lines 1-3), and displaying the subdocument on the client device (page 5, lines 3-4). The method further includes receiving at the client device a request of a user to have displayed another subdocument of the larger document (page 5, lines 4-6), and receiving separately from the server at the client device, the other subdocument (page 5, lines 6-7). The method further includes displaying the

other subdocument on the client device (page 5, lines 7-8) in which the subdocuments are of substantially the same length (page 5, lines 8-9).

Independent claim 26 recites a method including displaying a subdocument of a document on a client device (page 5, lines 14-16) and displaying an icon with the subdocument (page 5, line 16). In response to invocation of the icon, another subdocument of the document is fetched from a server (page 5, lines 17-19). The other subdocument is displayed on the client device (page 5, lines 18-19). The subdocuments are less than the entire document (page 5, lines 19-20) and are of approximately the same size (page 5, lines 20-21).

Independent claim 37 recites an apparatus including a network server configured to receive a machine readable file containing a document that is to be served to a client for display on a client device (page 6, lines 14-17), and to derive subdocuments from the file (page 6, lines 17-18). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 6, lines 18-20). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 6, lines 18-20). The subdocuments are of essentially the same length (page 5, lines 8-9).

Independent claim 38 recites an apparatus including means for receiving a machine readable file containing a document that is to be served to a client for display on a client device (page 6, line 23 to page 7, line 1) and means for deriving subdocuments from the file (page 7, line 1). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 7, lines 2-4). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 7, lines 4-6). The subdocuments are of essentially the same length (page 5, lines 8-9).

Independent claim 39 recites a machine-readable program stored on a machine-readable medium and capable of configuring a machine to receive a machine readable file containing a document that is to be served to a client for display on a client device (page 7, lines 8-11), and to derive subdocuments from the file (page 7, line 11). At least one of the subdocuments is expressed in a format that permits it to be served separately to the client (page 7, lines 12-14). At least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments (page 7, lines 14-16). The subdocuments are of essentially the same length (page 5, lines 8-9).

Independent claim 50 recites an apparatus including a client device configured to receive and display a subdocument of a larger document for display (page 5, lines 1-3). The client device is also configured to receive a request of a user to have displayed another subdocument of the larger document (page 5, lines 4-6), and thereafter separately receive and display at least one other subdocument (page 5, lines 6-7). The subdocuments are of substantially the same length (page 5, lines 8-9).

6. ***Grounds of Rejection to be Reviewed on Appeal.***

The following grounds of rejection are appealed:

(A) Claims 1, 5-14, 16-18 and 20-53 stand rejected under 35 U.S.C. §102(e) as being anticipated by Tuli (U.S. Patent No. 7,289,244, hereinafter "Tuli '244").

(B) Claim 2 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Tuli '244 in view of Borger et al. (U.S. Patent Application Publication No. 2002/0123334, hereinafter "Borger").

7. ***Argument.***

The claimed invention, as recited by independent claims 1, 13, 14, 17, 21, 26, 37-39 and 50, provide for the assembly of subdocuments using an algorithm that tends to balance the respective sizes of the subdocuments or make the subdocuments of substantially the same size or length. Appellants respectfully submit that the independent claims are patentable over the cited references either alone or in combination. In this regard, Appellant submits that, as an initial matter, relied upon portions of Tuli '244 are not prior art for the claimed invention. Furthermore, even if Tuli '244 was prior art in its entirety, Tuli '244 still fails to render the claimed invention unpatentable, either alone or in combination with Borger.

**A. Claims 1, 5-14, 16-18 and 20-53 are patentable over Tuli '244**

**1. At least some portions of Tuli '244 are not prior art.**

As an initial matter, Appellants respectfully note that the filing date of Tuli '244 is June 14, 2001, which is after the filing date of the present application (December 20, 2000).

However, Tuli '244 claims priority as a continuation-in-part from U.S. Patent No. 7,068,381 (hereinafter "Tuli '381"), which was filed on February 20, 2000. Thus, Tuli '244 is only prior art with respect to the present application for the subject matter that was first disclosed by Tuli '381 and not subject matter first added in Tuli '244.

Appellants respectfully submit that at least some of the subject matter cited in the final Office Action from Tuli '244 is not supported in Tuli '381 and is therefore not prior art for the present application. In particular, although the final Office Action cites numerous portions of Tuli '244 in connection with rejecting the independent and dependent claims, some of the listed citations for certain claimed features are either fully unsupported by Tuli '381 or only potentially partially supported by Tuli '381. Due to the clear and, in some cases, substantial differences between Tuli '244 and Tuli '381, and the fact that Tuli '244 is only prior art relative to the claimed invention for subject matter supported by Tuli '381, Appellants respectfully requested that Tuli '381 be relied upon as the primary reference in order to eliminate any difficulties in relation to determining which portions of Tuli '244 are indeed prior art. Despite this request, the Examiner has continued to cling to the use of Tuli '244 as a reference. Accordingly, passages of Tuli '244 that have been relied upon as disclosing features of the claimed invention must initially be analyzed to determine whether such passages correspond to material originally disclosed in Tuli '381.

Appellants respectfully submit that Tuli '381 fails to provide disclosure corresponding to several passages from Tuli '244 that are relied upon for rejecting the current claims. For example, claim 5 recites that the "assembling conforms to an algorithm that tends to favor assembling each of the subdocuments from segments that have common parents in the hierarchy". Independent claim 13 also recites this feature. In relation to rejecting these claims, the Office Action cites col. 6, lines 41-61 of Tuli '244 as disclosing this feature. However, there is no disclosure anywhere in Tuli '381 that remotely supports the disclosure of col. 6, lines 41-61 of Tuli '244. Thus, at least with respect to claim 5 and independent claim 13, Tuli '244 is clearly not prior art relative to the claimed invention.

Other specific examples relate to the independent claims. In this regard, independent claim 1 recites assembling subdocuments from segments conforming to an algorithm that tends to balance the respective sizes of the subdocuments. The remaining independent claims

include either the same recitation or a similar recitation in relation to the subdocuments being of the substantially or approximately the same size or length. The final Office Action alleged, in response to Appellants challenge regarding support, that the portions of Tuli '244 that are cited in connection with this feature (col. 1, lines 46-50, col. 3, lines 5-20 and col. 4, lines 37-43) are supported by col. 1, lines 29-35 and col. 2, lines 12-33 of Tuli '381. The final Office Action states that the cited passages of Tuli '244 describe how an "image or webpage is reduced to equal the size or proportion to the size of the receiving portable device" (see page 13 of the final Office Action). As such, the Examiner apparently takes the position that by disclosing a reduction of image size portions to match the size of the display, Tuli '244 would disclose balancing the respective sizes of subdocuments.

Notwithstanding the fact that segmenting a document into subdocuments is potentially different from segmenting an image, Appellants still respectfully submit that Tuli '381 fails to support the reduction of an image to a size equal to the size of the display of the receiving device as alleged by the Examiner. As such, even if one assumes that the Examiner's characterization of the disclosure of Tuli '244 is correct (i.e., that Tuli '244 discloses how an "image or webpage is reduced to equal the size or proportion to the size of the receiving portable device"), there is no disclosure in col. 1, lines 29-35, col. 2, lines 12-33, or any other portion of Tuli '381 that supports the concept of reducing the size of image portions to equal the size or proportion of the image portions to the size of the receiving portable device.

The most pertinent specific passage from Tuli '244 that is of interest in relation to this issue is col. 4, lines 37-42, which describes that the portion of the web page that is sent to the portable device is equal to or proportional to the size of the browser window in the device. This passage is not supported anywhere in Tuli '381. In this regard, col. 1, lines 29-35 of Tuli '381 merely describes a host computer including a browser translator that translates HTML images into black and white bit map or raster images that are sent to a portable device that compresses the images. Col. 2, lines 12-33 of Tuli '381 further describes the translation. The translation provides an image (reference numeral (5) from FIG. 2) that contains information that would normally be displayed on a single web page. The image (5) is larger than the display area of the browser window (6), so the translator further divides the image (5) into smaller sections (7, 8, 9 and 10). However, even the smaller sections are larger than display window (13), as is clearly



shown in FIG. 2. Thus, there has been no reduction of image portions to fit the size of the display of the receiving device and the Examiner's allegation of support from Tuli '381 for the disclosure of Tuli '244 is incorrect.

Furthermore, Tuli '381 describes how portions of the image are later displayed and traversed using scroll bars (see col. 2, lines 42-55). If the image were reduced to portions sized to fit the size of the screen, there would be no need for scrolling to traverse the image. Thus, Tuli '381 teaches away from the reducing of images to fit the screen size to thereby balance the sizes by still providing for scrolling over the image in order to enable viewing the whole image. If Tuli '381 fails to disclose that an "image or webpage is reduced to equal the size or proportion to the size of the receiving portable device" as alleged in the final Office Action, then Tuli '381 does not support the feature from Tuli '244 that is relied upon for rejecting independent claim 1, and the corresponding portion of Tuli '244 is not prior art relative to the claimed invention.

Accordingly, since Tuli '244 is not supported by Tuli '381 with respect to subject matter cited from Tuli '244 in connection with rejecting the independent claims in relation to the features of balancing the respective sizes of the subdocuments, or the subdocuments being of the same size or length from respective ones of the independent claims of the claimed invention, all of the rejections of the final Office Action should be reversed.

**2. Tuli '244 fails to anticipate 1, 5-14, 16-18 and 20-53 in any case.**

**a) Independent claims 1, 13, 14, 17, 21, 26, 37-39 and 50**

The following arguments are applicable to all independent claims. In this regard, even if the cited portions of Tuli '244 were supported by the disclosure of U.S. Patent No. 7,068,381, the cited portions of Tuli '244 (and indeed all portions of Tuli '244) still fail to teach or suggest the recited features set forth in the independent claims of the present application.

The claimed invention is related to segmenting, transforming and/or viewing electronic documents on devices with limited capabilities. In particular, due to the limited size of a display that is typically associated with such devices, serving of documents for display is often a nontrivial operation. Accordingly, embodiments of the claimed invention segment the electronic documents into subdocuments which can later be assembled for display in a particular manner. In this regard, for example, independent claim 13 recites, *inter alia*, assembling subdocuments

from segments conforming to an algorithm that tends to **balance the respective sizes of the subdocuments**. In other words, as recited, for example, in independent claim 14, the subdocuments are of approximately the same size, or as recited in independent claim 17, the subdocuments are of essentially the same length. Independent claim 1 includes a similar recitation to that of independent claim 13. Independent claim 26 includes a similar recitation to that of independent claim 14. Independent claims 21, 37-39 and 50 include a similar recitation to that of independent claim 17.

Tuli '244 describes the reduction of color depth of an entire image (text and graphics) by reducing 24 bit color to a black and white bit map. The final Office Action alleges that Tuli '244 discloses an algorithm that tends to **balance the respective sizes of the subdocuments** by virtue of the disclosure at col. 1, lines 46-50, col. 3, lines 5-15 and col. 4, lines 37-42 of Tuli '244. Col. 1, lines 46-50 describes a host computer compressing an image of a web page that is reduced in terms of color depth to send the compressed image to a portable device for display of a bitmap of a portion of the web page. Col. 3, lines 5-15 describes reducing the color depth by reducing the image to a black and white bitmap or raster image prior to compression. Col. 4, lines 37-42 describes that the portion of the web page that is sent to the portable device is equal to or proportional to the size of the browser window in the device.

However, as an initial matter, the claimed invention is not merely directed to fitting portions of an image to the size of a display. Rather, the claimed invention is directed to balancing the respective sizes of subdocuments that are assembled from segments of a document. The balanced sizes of the claimed subdocuments need not necessarily be equal to the size of the display screen. However, regardless of their sizes relative to the display screen, independent claim 1 is clear that the specific items that have balanced sizes (or approximately the same size or length) are subdocuments of a document, and that the subdocuments are assembled from segments. Tuli '244 describes image portions of a web page that is sent to the portable device having portion sizes equal to or proportional to the browser window size of the device. However, if the portion of the webpage in Tuli '244 is read to correspond to the claimed subdocument, which is assembled to have balanced size with other subdocuments, there would be nothing from Tuli '244 to correspond to the segments that are assembled to form the subdocuments. Alternatively, if the whole image of Tuli '244 is considered to correspond to the

claimed subdocument so that the portion of the whole image of Tuli '244 is read to correspond to the claimed segments, then it is clear that the whole image of Tuli '244 is not assembled in a manner that balances respective sizes of subdocuments as provided in the claimed invention. Thus, the final Office Action is inconsistent with respect to applying the disclosure of Tuli '244 to the independent claims. Moreover, if a consistent approach is taken to matching claimed features to items disclosed in Tuli '244, it is clear that Tuli '244 fails to teach or suggest the above underlined claimed features for the reasons explained above.

**b) Independent claims 1, 13, 14, 17 and 37-39**

Yet further inconsistencies in the application of the disclosure of Tuli '244 to the claimed features exist. For example, FIG. 5 of Tuli '244 shows a tree of links between web pages. In independent claims 1, 13, 14, 17 and 37-39, the subdocuments are linked to each other or enabled to be linked to each other. Thus, if Tuli '244 is read to correspond to the claimed invention, then the items linked in FIG. 5 must correlate to the claimed subdocuments, which are linked or enabled to be linked to each other. However, the linked items of FIG. 5 of Tuli '244 are whole images of the web pages. These whole images do not correspond to the portions of images that the final Office Action later alleges correspond to the claimed subdocuments. Moreover, the web pages are not balanced in size or length, nor does the final Office Action allege as much. Instead, the Office Action alleges that the portions of the web pages (i.e., element 6 from FIGS. 2 and 4) are of equal size. Thus, the Examiner is apparently inconsistent as to which features of Tuli '244 correspond to respective features of the claimed invention. If the linked web pages of Tuli '244 correspond to the claimed subdocuments, then Tuli '244 clearly fails to teach or suggest that these web pages are of substantially equal length or size or have balanced respective sizes. Meanwhile, if the Examiner maintains that the portions of the web pages, which are matched to the size of the device display, correspond to the claimed subdocuments, then Tuli '244 clearly fails to teach or suggest that at least one subdocument contains information enabling it to be linked to another subdocument as provided in independent claims 1, 13, 14, and 37-39 or linking it to another subdocument as provided in independent claim 17.

**c) Independent claim 26**

Independent claim 26 includes a very explicit example of the misapplication of the disclosure of Tuli '244 to the claimed invention. In this regard, independent claim 26 provides for displaying a subdocument of a document on a client device, displaying an icon with the subdocument and, in response to invocation of the icon, fetching another subdocument of the document from a server and displaying the other subdocument on the client device in which the subdocuments are less than the entire document and the subdocuments are of approximately the same size. The icon described in Tuli '244 is for providing web functions (col. 4, lines 26-29). The icons, when clicked, cause a message to be sent from the PDA browser to make the host computer mirror the PDA browser window. Thus, the icons do not provide for fetching of another subdocument in response to invocation of the icons as provided in independent claim 26. Furthermore, the cited passage of Tuli '244 that is alleged to correspond to the fetching of subdocuments in response to activation of the icon (namely col. 5, lines 58-65), actually relates to a completely different set of links and not to the icons mentioned at col. 4, lines 26-29 of Tuli '244. Regardless, the links discussed at col. 5, lines 58-65 link viewed web pages, which appear to correlate to the claimed documents themselves and not subdocuments, and not subdocuments as the final Office Action apparently considers the portions of images of the web pages to correspond to the subdocuments when referring to the size of the subdocuments. Thus, in relation to independent claim 26 also, the final Office Action is inconsistent as to the application of disclosure from Tuli '244 to the claimed features. Moreover, recognition of the inconsistency brings into light the failure of Tuli '244 to teach or suggest that which is claimed in independent claim 26. Accordingly, Tuli '244 fails to teach or suggest displaying an icon with the subdocument and, in response to invocation of the icon, fetching another subdocument of the document from a server and displaying the other subdocument on the client device as provided in independent claim 26.

**d) Independent claims 17, 21, 37-39 and 50**

Finally, even if the image portions of Tuli '244 are seen to correspond to the claimed subdocuments and the inconsistency of the rejections in relation to applying Tuli '244 in relation to the linking between subdocuments is ignored, Tuli '244 still fails to teach or suggest that the

subdocuments are of essentially or substantially the same length. In this regard, as stated above, the claimed invention relates to subdocuments of a document and independent claims 17, 21, 37-39 and 50 each recite that the subdocuments are of essentially or substantially the same length. While an image portion can be argued to have a "size", Appellants respectfully dispute that an image portion would be considered to have a "length" in the same context in which a document can be said to have a "length" as provided by independent claims 17, 21, 37-39 and 50. Thus, Appellants respectfully submit that even if Tuli '244 is considered to disclose subdocuments with balanced or equal sizes, Tuli '244 fails to teach or suggest any subdocuments of essentially or substantially the same length as provided in independent claims 17, 21, 37-39 and 50.

Accordingly, for all the reasons stated above, Tuli '244 fails to teach or suggest assembling subdocuments from segments conforming to an algorithm that tends to **balance the respective sizes of the subdocuments** as generally set forth in independent claims 1 and 13, the subdocuments being of approximately the same size as set forth in independent claims 14 and 26, and that the subdocuments are of essentially or substantially the same length as set forth in independent claims 17, 21, 37-39 and 50. Claims 5-12, 16, 18, 20, 22-25, 27-36, 40-49 and 51-53 depend either directly or indirectly from corresponding ones of independent claims 1, 13, 14, 17, 21, 26, 37-39 and 50 and thus include all the recitations of their corresponding independent claims. Therefore, dependent claims 5-12, 16, 18, 20, 22-25, 27-36, 40-49 and 51-53 are patentable for at least the same reasons given above for independent claims 1, 13, 14, 17, 21, 26, 37-39 and 50. Thus, Appellants respectfully submit that the rejections of claims 1, 5-14, 16-18 and 20-53 should be reversed.

**B. Claim 2 is patentable over the combination of Borger and Tuli '244.**

As stated above, Tuli '244 fails to teach or suggest assembling subdocuments from segments conforming to an algorithm that tends to **balance the respective sizes of the subdocuments** as generally set forth in independent claim 1. Borger is merely relied upon for the proposition that XML is well known. As such, Borger fails to cure the above noted deficiencies of Tuli '244 and is not cited as such. Thus, any combination of Borger and Tuli '244 also fails to render independent claim 1 obvious. Claim 2 depends directly from

independent claim 1 and thus includes all the recitations of independent claim 1. Therefore, dependent claim 2 is patentable for at least the same reasons given above for independent claim

1.

8. ***Claims Appendix.***

The claims currently on appeal are as follows:

1. (Previously Presented) A method comprising  
receiving a machine readable file containing a document that is to be served to a client for  
display on a client device, the organization of the document in the file being expressed as a  
hierarchy of information, and

deriving subdocuments from the hierarchy of information by traversing the hierarchy and  
assembling the subdocuments from segments, at least some of the subdocuments each being  
assembled from more than one of the segments, at least one of the subdocuments being  
expressed in a format that permits it to be served separately to the client, at least one of the  
subdocuments containing information that enables it to be linked to another one of the  
subdocuments,

wherein the assembling of the subdocuments conforms to an algorithm that tends to  
balance the respective sizes of the subdocuments.

2. (Previously Presented) The method of claim 1 in which the hierarchical  
expression comprises extensible mark-up language (XML).

3. (Canceled)

4. (Canceled)

5. (Previously Presented) The method of claim 1 in which the assembling conforms  
to an algorithm that tends to favor assembling each of the subdocuments from segments that  
have common parents in the hierarchy.

6. (Previously Presented) The method of claim 1 in which the assembling conforms  
to an algorithm that tends to favor assembling each of the subdocuments from segments for  
which replications of nodes in the hierarchy is not required.

7. (Original) The method of claim 1 in which the file is received from an origin server associated with the file.

8. (Original) The method of claim 7 in which the file is expressed in a language that does not organize segments of the document in a hierarchy, and the deriving of subdocuments includes first converting the file to a language that organized segments of the document in a hierarchy.

9. (Original) The method of claim 1 also including serving the subdocuments to the client individually as requested by the client.

10. (Original) The method of claim 9 in which the subdocuments are served to the client using a hypertext transmission protocol.

11. (Original) The method of claim 9 in which the subdocuments are requested by the client based on the contained information that enables it to be linked to another of the subdocuments.

12. (Original) The method of claim 1 also including identifying a portion of the document that is to be displayed separately from the rest of the document,

the portion of the document that is to be displayed separately being excluded from the subdocument in which the portion would otherwise have appeared, the portion of the document that is to be displayed separately being included in at least one corresponding subdocument, and

when the subdocument in which the portion would otherwise have appeared is served to the client device, embedding a graphical device that can be invoked by the user to retrieve the subdocument that includes the portion of the document that is to be displayed separately.



13. (Previously Presented) A method comprising  
receiving, from an origin server, a machine readable file containing a document that is to  
be served to a client for display on a client device, the file being expressed in a language that  
does not organize segments of the document in a hierarchy,  
converting the file to a language that organizes segments of the document in a hierarchy,  
traversing the hierarchy and assembling subdocuments from the segments, at least some  
of the subdocuments being assembled from more than one of the segments, the assembling  
conforming to an algorithm that tends to (a) balance the respective sizes of the subdocuments, (b)  
favor assembling the subdocuments from segments that have common parents in the hierarchy,  
and (c) assemble the subdocuments from segments for which replications of nodes in the  
hierarchy is not required,  
at least one of the subdocuments being expressed in a format that permits it to be served  
separately to the client, at least one of the subdocuments containing information that enables it to  
be linked to another one of the subdocuments, and  
serving the subdocuments to the client individually as requested by the client based on  
the contained information that enables it to be linked to another of the subdocuments.

14. (Previously Presented) A machine-readable document held on a storage medium  
for serving to a client, the document being organized as a set of subdocuments, at least one of the  
subdocuments containing information that enables the subdocument to be linked to another of  
the subdocuments, the information enabling the subdocument to be linked comprising a URL,  
the subdocuments comprising an assembly of segments of the document that are part of a  
hierarchical expression of the document, the subdocuments being of approximately the same  
size.

15. (Canceled)

16. (Original) The method of claim 14 in which the hierarchical expression  
comprises extensible markup language (XML).

17. (Previously Presented) A method comprising  
receiving from a client a request for a document to be displayed on a client device,  
serving separately to the client a subdocument that represents less than all of the  
requested document, the subdocument containing information that links it to at least one other  
subdocument,  
receiving from the client an invocation of the link to the other subdocument, and  
serving separately to the client device the other subdocument, the subdocuments being of  
essentially the same length.

18. (Original) The method of claim 17 in which the subdocuments are served to the  
client using a hypertext transmission protocol.

19. (Canceled)

20. (Original) The method of claim 17 in which the subdocuments are of a length  
that can be displayed on the client device without further truncation.

21. (Original) A method comprising  
receiving from a server at a client device, a subdocument of a larger document for display  
on the client device,  
displaying the subdocument on the client device,  
receiving at the client device a request of a user to have displayed another subdocument  
of the larger document,  
receiving separately from the server at the client device, the other subdocument, and  
displaying the other subdocument on the client device,  
the subdocuments being of substantially the same length.

22. (Original) The method of claim 21 in which the subdocuments are expressed in a  
hypertext transmission protocol.

23. (Original) The method of claim 21 in which the request of the user is expressed as a URL.

24. (Original) The method of claim 21 in which all of each of the subdocuments is displayed at one time on the client device.

25. (Original) The method of claim 21 in which less than all of each of the subdocuments is displayed on the client device at one time.

26. (Previously Presented) A method comprising  
displaying a subdocument of a document on a client device,  
displaying an icon with the subdocument, and  
in response to invocation of the icon, fetching another subdocument of the document from a server and displaying the other subdocument on the client device,  
the subdocuments being less than the entire document, the subdocuments being of approximately the same size.

27. (Original) The method of claim 26 in which only a portion of each of the subdocuments is displayed at one time.

28. (Original) The method of claim 27 also including displaying an indication of the position of the currently displayed subdocument in a series of subdocuments that make up the document.

29. (Previously Presented) The method of claim 28 in which the indication includes the total number of subdocuments in the series and the position of the currently displayed document in the sequence.

30. (Original) The method of 1, 17, or 21 in which the subdocuments are derived from the document at the time of a request from the client device for the document.

31. (Original) The method of claim 30 in which the subdocuments are derived in a manner that is based on characteristics of the client device.

32. (Original) The method of claim 31 in which the characteristics of the client device are provided by the client in connection with the request.

33. (Original) The method of claim 32 in which the characteristics include the display capabilities of the client device.

34. (Original) The method of claim 1, 17, or 21 in which the subdocuments are derived from the document before the client requests the document from the server.

35. (Original) The method of claim 34 in which subdocuments are derived for different documents from different origin servers.

36. (Original) The method of claim 1, 17, or 21 in which the subdocuments are derived from the document at a wireless communication gateway.

37. (Previously Presented) Apparatus comprising  
a network server configured to receive a machine readable file containing a document that is to be served to a client for display on a client device, and to derive subdocuments from the file, at least one of the subdocuments being expressed in a format that permits it to be served separately to the client, at least one of the subdocuments containing information that enables it to be linked to another one of the subdocuments, the subdocuments being of essentially the same length.

38. (Previously Presented) Apparatus comprising  
means for receiving a machine readable file containing a document that is to be served to  
a client for display on a client device, and  
means for deriving subdocuments from the file, at least one of the subdocuments being  
expressed in a format that permits it to be served separately to the client, at least one of the  
subdocuments containing information that enables it to be linked to another one of the  
subdocuments, the subdocuments being of essentially the same length.

39. (Previously Presented) A machine-readable program stored on a machine-  
readable medium and capable of configuring a machine to  
receive a machine readable file containing a document that is to be served to a client for  
display on a client device, and  
derive subdocuments from the file, at least one of the subdocuments being expressed in a  
format that permits it to be served separately to the client, at least one of the subdocuments  
containing information that enables it to be linked to another one of the subdocuments, the  
subdocuments being of essentially the same length.

40. (Previously Presented) The method of claim 7 in which the file comprises an  
electronic document.

41. (Previously Presented) The method of claim 7 in which the file comprises an  
email file.

42. (Previously Presented) The method of claim 7 in which the file is received from  
the origin server in the form of a webpage.

43. (Previously Presented) The apparatus of claim 37 in which the network server is  
configured to derive the subdocuments by traversing the hierarchy and assembling the

subdocuments from segments, at least some of the subdocuments each being assembled from more than one of the segments.

44. (Previously Presented) The apparatus of claim 37 in which the file is received from an origin server associated with the file.

45. (Previously Presented) The apparatus of claim 44 in which the file is expressed in a language that does not organize segments of the document in a hierarchy, and the network server deriving the subdocuments includes first converting the file to a language that organized segments of the document in a hierarchy.

46. (Previously Presented) The apparatus of claim 37 in which the network server is also configured to serve the subdocuments to the client individually as requested by the client.

47. (Previously Presented) The apparatus of claim 37 in which the subdocuments are of essentially the same length.

48. (Previously Presented) The machine-readable program of claim 39 in which the machine-readable program is capable of configuring the machine to derive the subdocuments by traversing the hierarchy and assembling the subdocuments from segments, at least some of the subdocuments each being assembled from more than one of the segments.

49. (Previously Presented) The machine-readable program of claim 39 in which the machine-readable program is capable of configuring the machine to also serve the subdocuments to the client individually as requested by the client.

50. (Previously Presented) An apparatus comprising:  
a client device configured to receive and display a subdocument of a larger document for display, wherein the client device is also configured to receive a request of a user to have

displayed another subdocument of the larger document, and thereafter separately receive and display at least one other subdocument, the subdocuments being of substantially the same length.

51. (Previously Presented) The apparatus of claim 50 in which the client device is configured to receive and display subdocuments that have been derived from a document in a manner that is based on characteristics of the client device, the client device having provided the characteristics in connection with a request.

52. (Previously Presented) The apparatus of claim 50 in which the client device is configured to receive and display subdocuments that have been derived from a document in a manner that is based on characteristics of the client device, the characteristics including at least one display capability of the client device.

53. (Previously Presented) The apparatus of claim 50 in which the client device comprises a mobile phone or personal digital assistant.

9. ***Evidence Appendix.***

None.



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10. ***Related Proceedings Appendix.***

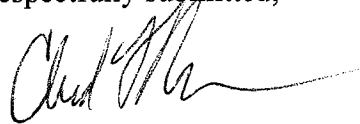
None.

**CONCLUSION**

For at least the foregoing reasons, Appellants respectfully request that the rejections be reversed.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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